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Appl. No. 10/716,580 Amdt. dated August 3, 2007 Reply to Office Action of March 5, 2007 <u>PATENT</u>

## Amendments to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application:

## **Listing of Claims:**

- 1. (Currently amended) Vector A vector for the expression of immunoglobulin-cytokine fusion proteins in malignant B cells, comprising the following components operably linked to each other
- (a) a region of at least 1.5 kb which is homologous to a region of the  $\mu$  intron or the k intron:
- (b) at least one DNA sequence encoding a domain constant region of an immunoglobulin or a functional part thereof of the constant region;
  - (c) a DNA sequence encoding a cytokine; and
- (d) a market marker gene which is selectable in eukaryotic B cells and contains a functional enhancer region.
- 2. (Currently amended) Vector The vector according to claim 1, wherein said region of at least 1.5 kb contains a functional  $C_{\mu}$  or  $C_k$  enhancer.
- 3. (Currently amended) Vector The vector according to claim 1, wherein said region of at least 1.5 kb contains a non-functional  $C_{\mu}$  or  $C_k$  enhancer.
- 4. (Currently amended) Vector The vector according to claim 1, wherein the marker gene selectable in eukaryotic B cells contains a non-functional enhancer.
- 5. (Currently amended) Vector The vector according to claim 1, wherein the marker gene selectable in eukaryotic B cells lacks an enhancer.
- 6. (Canceled) Vector according to claim 1, wherein the DNA sequence of (b) encodes a constant region or a functional part thereof.

Appl. No. 10/716,580

Amdt. dated August 3, 2007

Reply to Office Action of March 5, 2007

PATENT

- 7. (Currently amended) Vector The vector according to claim 1, wherein the region homologous to a region comprising the  $C_{\mu}$  or the  $C_{k}$  enhancer of the  $\mu$  or the k intron comprises at least 1.9 kb.
- 8. (Currently amended) Vector The vector according to claim 1, wherein the region homologous to a region comprising the  $C_{\mu}$  or the  $C_{k}$  enhancer of the u or the k intron comprises at least 2.0 kb.
- 9. (Currently amended) Vector The vector according to claim 1, said vector containing a regulatory unit which is compatible with bacteria.
- 10. (Canceled) Vector according to claim 1, wherein the immunoglobulin of part b is a chimeric immunoglobulin.
- 11. (Currently amended) Vector The vector according to claim 1, wherein the DNA sequence of (b) encodes the domain constant region of a human immunoglobulin chain.
- 12. (Currently amended) Vector The vector according to claim 1, wherein the DNA sequence of (b) encodes domains derived from the constant region of a mouse, rat, goat, horse or sheep immunoglobulin.
- 13. (Currently amended) Vector The vector according to claim 1, wherein the DNA sequence of (b) encodes all the C domains the constant region of a secretory antibody.
- 14. (Currently amended) Vector The vector according to claim 1, wherein the DNA sequence according to (b) encodes all the C domains the constant region of a membrane-bound antibody.
- 15. (Currently amended) Vector The vector according to claim 1, characterized in that said DNA sequence of (c) encodes interleukins, interferons, colony-stimulating factors, lymphokins or growth factors an interleukin, an interferon, a colony-stimulating factor, a lymphokine, or a growth factor.

Appl. No. 10/716,580 Amdt. dated August 3, 2007 Reply to Office Action of March 5, 2007 PATENT

- 16. (Currently amended) Vector The vector according to claim 15, characterized in that said DNA sequence of (c) encodes IL-2, IL-4, IL-7, IL-12, IL-13, GM-CSF or interferon γ.
- 17. (Currently amended) Vector The vector according to claim 1, wherein the selectable marker gene is gpt, neo, or a marker gene encoding hygromycin resistance.

18-28. (Canceled)

- 29. (Withdrawn, currently amended) Malignant A malignant B cell containing a vector according to claim 1 in integrated form, wherein an immunoglobulincytokine fusion protein is expressed by said cell.
  - 30. (Canceled)